ROUTE 63 CORRIDOR STUDY

REVISED DRAFT

EXISTING AND FUTURE CORRIDOR NEEDS

Genesee, Wyoming and Livingston Counties, New York

March, 2003

Prepared For:
New York State Department
of Transportation, Region 4
1530 Jefferson Road
Rochester, NY 14623

DOT Contract No. D012573
DOT PIN No. 4063.22.101
Fed. Aid No. Q55-5PR1-013
SBG Project No. 17610

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I. GENERAL

This Technical Report, *Existing and Future Corridor Needs*, documents two important parts of this study. The first part is the estimation of **future traffic volumes**. Planning studies typically study twenty years into the future, to assure that proposed improvements will be adequate to address the traffic conditions anticipated to exist at that future time. To accomplish this, it is necessary to develop an estimate of what traffic can be expected to be on the roadway system in twenty years, especially, in this case, the number of trucks.

The second part presents the identification of **existing and future corridor needs**. This part is a critical component of the study, as it documents the issues and problems that will be addressed by the various alternatives (to be developed in the next part of the study). The needs presented in this report have been identified based on a detailed review of collected data, traffic and accident analyses and public input. This information is presented and summarized in Technical Report #1 - *Features Inventory and Data Collection Report.*

II. ESTIMATION OF FUTURE TRAFFIC VOLUMES

To estimate future needs, reasonable twenty-year (2022) future traffic volume forecasts need to be developed. As discussed in Technical Report #1 - *Features Inventory and Data Collection Report*, typical corridor traffic consists of cars, plus trucks doing business within the corridor-wide area, the Western New York area and the Northeast US/Canada trade area. Corridor-wide truck traffic consists of all trucks with an origin and/or destination within the study area. Western New York truck traffic originates in, or is destined to some location within western New York, but do not begin or end their trips within the study area. Northeast US/Canada trade area truck traffic travels between points outside of the corridor-wide and Western New York area, passes through the corridor and contributes to a much broader economic area.

A review of historical trends clearly shows that the number of Northeast US/Canada trade area trucks has been growing at a much faster rate than cars, corridor-wide and western New York trucks. This high rate of growth for Northeast US/Canada trade area trucks in the study area, appears to be directly related to the passage of NAFTA and is expected to continue throughout the 20-year planning horizon used for this study. To account for this high rate of truck traffic growth, it was determined that two different growth rates would be needed to accurately reflect what the future traffic conditions are projected to be for the study area. The first growth rate would represent normal background growth and will be applied to car (non-truck) traffic, as well as corridor-wide and Western New York truck traffic. A second, higher growth rate, representing the projected increases in freight and international truck traffic, will be applied to the Northeast US/Canada trade area truck traffic along the corridor. The method and rationale for determining these rates is described in the following sections.

Corridor-Wide and Western New York Background Traffic Growth

Upon reviewing Comprehensive Plans for the major towns in the study area, it was determined that this area will experience minimal, if any, growth during the next twenty years. Historical trends were reviewed, as provided by the 2000 Census. Population data for the major towns/villages along the primary study routes were compared between 1990 and 2000 and the following overall growth rates were calculated for each county in the study area:

Genesee County	0.5% per year
Livingston County	0.4% per year
Wyoming County	0.7% per year

In forecasting corridor-wide and western New York traffic growth, the key determining factors are anticipated population and employment growth. Based on meetings with planning and economic development officials representing each county, the general consensus from each is that, although population has increased between 1990 and 2000, the rate at which it will continue to grow is expected to decrease. This assumption, combined with declining to relatively static employment growth, suggests that the corridor-wide and western New York portion of the traffic mix through the study area may not increase significantly from today's levels in the foreseeable future.

Based on the need to account for any unanticipated future land use change and using engineering judgment, a conservative approach was taken and a **single background growth rate of 0.5% per year** was chosen for the **overall study area**. This likely represents a "worst case" scenario for area-wide traffic growth, given the expectations of county representatives. However, from an analysis standpoint, this approach ensures that unforeseen changes in the area economy and/or land use that could result in changes in area traffic patterns are accounted for.

Northeast US/Canada Trade Area Truck Growth

When NAFTA was put into effect in 1994, truck traffic increased significantly at the US-Canada border crossings. As an example, from 1995 to 2000, truck volumes at the Peace Bridge in Buffalo increased by 5.2% per year. Similarly, the Queenston-Lewiston Bridge north of Niagara Falls experienced a 6.4% per year growth in commercial vehicles.

A number of studies have been completed that predict future truck volumes at the Buffalo-Niagara border crossings. These studies indicate that this initial spike in truck volume growth will eventually level off and more moderate growth rates will be experienced over the next twenty to thirty years. Based on review of these studies, an **average annual growth rate of 3.5%** has been chosen for the purpose of forecasting Northeast US/Canada trade area truck increases for this study. This rate represents the median rate used for forecasting purposes within these studies. Summaries of the studies reviewed are discussed below:

- *Niagara Peninsula Transportation Needs Assessment Study 2001* - Commercial vehicle traffic across the Peace Bridge and Queenston-Lewiston Bridge is predicted to grow at between 2.6 and 3.7 % per year to year 2031.

- *Peace Bridge Plaza and Connecting Roadway System DR/DEIS* – In accordance with the "Niagara Frontier US – Canada Bridge Study", heavy vehicles were increased by 3.3% per year to year 2020.

- *"Niagara – One Frontier, Two Countries, Three Bridges" Phase I Report* - Describes a multi-variable forecasting model whose input includes existing and future demographic and population data, Canada-US trade data, Ontario-New York trade data, historical NFBC bridge crossing data, historical exchange rate patterns, and the impact of increased trade activity under NAFTA. Based on this model, developed by McCormick Rankin Corporation, an growth rate of 5% per year was forecast for commercial vehicles at the NFBC bridges to year 2020.

Based on the study findings, it is expected that a large percentage of the future international US-Canada truck traffic using the Buffalo/Niagara Falls border crossings will end up using the Route 63 corridor.

According to the Bureau of Transportation Statistics, the number of trucks entering the US from Canada fell 3.8% during 2000-2001. This was the first annual decline since NAFTA took effect in 1994. A portion of this decline can be attributed to the effects of 9/11/01 and another portion to the weakened economy. On a national level, incoming truck crossings in 2001 declined from 2000 for all months except January. Specifically, New York State experienced an annual decline of 4%. Once the economy rebounds, and international border security issues are settled, it is anticipated that Northeast US/Canada trade area truck traffic growth should return to the 3.5% annual growth level.

Future 2022 AADT Volumes

To estimate future truck and traffic volumes, the background and pass-through growth rates were applied to existing volumes and factored out over a twenty-year period. For primary corridor roadways, both the background growth rate of 0.5% per year and the Northeast US/Canada trade area growth rate of 3.5% per year were applied to the respective traffic components, as these roadways contain a mix of Northeast US/Canada trade area trucks and other traffic. For the secondary roadways, it was assumed that all traffic would be classified as corridor-wide and western New York, as trucks are not regularly using these roadways as pass-through routes. As such, only the background growth rate of 0.5% per year was applied to the existing volumes along the secondary roadways. The projected 2022 AADT volumes are presented on *Figure 1*. As shown, truck volumes are expected to increase between 400 – 800 units per day along the primary corridor, depending on location.

ROUTE 5
AADT- 6160
TRUCKS- 616 (10%)
CHANGE IN TRUCKS FROM 2002 - (+ 56)

ROUTE 77
AADT- 7980
TRUCKS- 1915 (24%)
CHANGE IN TRUCKS FROM 2002 - (+ 426)

ROUTE 77
AADT- 6944
TRUCKS- 1875 (27%)
CHANGE IN TRUCKS FROM 2002 - (+ 426)

ROUTE 33
AADT- 5280
TRUCKS- 1056 (20%)
CHANGE IN TRUCKS FROM 2002 - (+ 96)

ROUTE 20
AADT- 5614
TRUCKS- 2302 (41%)
CHANGE IN TRUCKS FROM 2002 - (+ 553)

ROUTE 20
AADT- 2310
TRUCKS- 347 (15%)
CHANGE IN TRUCKS FROM 2002 - (+ 32)

ROUTE 20
AADT- 5280
TRUCKS- 686 (13%)
CHANGE IN TRUCKS FROM 2002 - (+ 62)

ROUTE 20
AADT- 8384
TRUCKS- 2515 (30%)
CHANGE IN TRUCKS FROM 2002 - (+ 589)

ROUTE 20
AADT- 4608
TRUCKS- 1981 (43%)
CHANGE IN TRUCKS FROM 2002 - (+ 562)

ROUTE 63
AADT- 7850
TRUCKS- 2826 (36%)
CHANGE IN TRUCKS FROM 2002 - (+ 851)

ROUTE 63
AADT- 7891
TRUCKS- 2841 (36%)
CHANGE IN TRUCKS FROM 2002 - (+ 851)

ROUTE 36
AADT- 2970
TRUCKS- 297 (10%)
CHANGE IN TRUCKS FROM 2002 - (+ 27)

ROUTE 63
AADT- 6620
TRUCKS- 1920 (29%)
CHANGE IN TRUCKS FROM 2002 - (+ 568)

ROUTE 36
AADT- 2955
TRUCKS- 295 (10%)
CHANGE IN TRUCKS FROM 2002 - (+ 26)

ROUTE 63
AADT- 5375
TRUCKS- 2526 (47%)
CHANGE IN TRUCKS FROM 2002 - (+ 744)

ROUTE 20A
AADT- 9520
TRUCKS- 952 (10%)
CHANGE IN TRUCKS FROM 2002 - (+ 82)

ROUTE 63
AADT- 14888
TRUCKS- 2383 (16%)
CHANGE IN TRUCKS FROM 2002 - (+ 622)

ROUTE 63
AADT- 6573
TRUCKS- 2235 (34%)
CHANGE IN TRUCKS FROM 2002 - (+ 618)

ROUTE 238
AADT- 1760
TRUCKS- 123 (7%)
CHANGE IN TRUCKS FROM 2002 - (+ 11)

ROUTE 20A
AADT- 5060
TRUCKS- 253 (5%)
CHANGE IN TRUCKS FROM 2002 - (+ 23)

ROUTE 20A
AADT- 5280
TRUCKS- 264 (5%)
CHANGE IN TRUCKS FROM 2002 - (+ 24)

ROUTE 390
AADT- 17843
TRUCKS- 5174 (29%)
CHANGE IN TRUCKS FROM 2002 - (+ 621)

Route 63 Corridor Study

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Figure 1

Projected Average Annual Daily Traffic
Through the Primary and Secondary
Focus Areas
Year 2022

- Secondary Focus Area Roadways
- Primary Focus Area Roadways
- State Roads
- Non-State Roads
- City
- Village
- Town
- County

III. SUMMARY OF ISSUES/PROBLEMS AND NEEDS

As documented in Technical Report #1 - *Features Inventory and Data Collection Report*, the study team has gathered and reviewed traffic, safety and geometry data throughout the study area; reviewed and organized the public comments received to-date, and estimated future traffic volumes through the 2022 design year. Based on the review and analysis of this information, the study team then summarized the issues and needs identified for the primary travel corridor. These issues and needs fall into two distinct categories:

- **Location-Specific Issues and Needs**
- **Regional Issues and Needs**

A. LOCATION-SPECIFIC ISSUES/PROBLEMS AND NEEDS

Based on all of the input received and analysis conducted, an initial set of issues and problems was developed. This list of issues and problems was screened to identify those that are directly contributing to safety problems along the major corridors and that adversely affect the economy or quality of life throughout the region. As part of the screening process at the location-specific level, a problem or issue was chosen for further study if two of the following conditions were met:

1. The **accident analysis** indicated either a high number of accidents or a high percentage of accidents involving trucks were occurring. A high number of accidents was considered to be ten (10) or more at a single location over the three year analysis period. This condition was waived in the instance of Route 20/East Road where only nine (9) accidents occurred over three years, but five (5) involved personal injury and two (2) involved fatalities.

   Truck involvement was considered to be high when the percentage was greater than 25%. This value represents the approximate median percentage of truck involvement in accidents at all study area intersections listed on the NYSDOT GIS Accident Reporting System. The actual range of percentages varies substantially from less than 10% truck involvement on secondary corridor roadways, to over 50% at major intersections along the primary corridor (see *Figure 16 – Safety Problem Locations* in the *Features Inventory and Data Collection Report*).

2. A **non-standard roadway or other feature** exists that appears to be a cause of, or contributing factor towards an accident pattern or a publicly identified problem.

3. **Public input** indicated a location that was not experiencing actual accidents or capacity deficiencies, but appeared to have the potential for problems.

Using this screening method, the study team identified the following thirteen specific problem locations that this study will focus on addressing:

- Route 77 / NYS Thruway – Exit 48A in the Town of Pembroke
- Route 77 / Route 33 intersection in the Village of Corfu

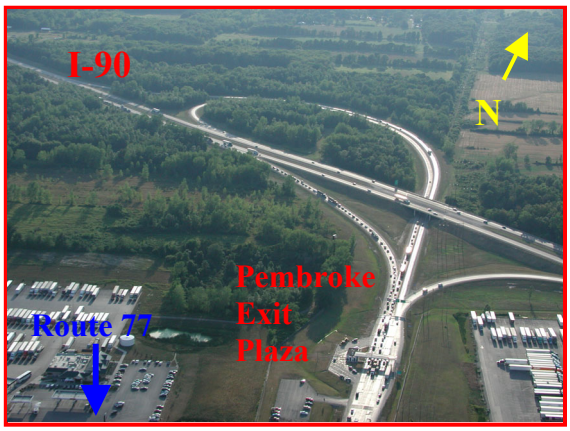
- Route 77 - Section from Reynolds Road to Sumner Road – Town of Darien
- Route 77 / Sumner Road intersection in the Town of Darien
- Route 77 / Route 20 intersection in the Town of Darien
- Route 20 / East Road Intersection in the Town of Bethany
- Route 63 / Route 20 intersection in the Town of Pavilion
- Route 63 / Route 19 intersection in the Village of Pavilion
- Route 63 – Peoria Curve in the Town of Covington
- Route 63 / Route 36 intersection in the Village of Greigsville
- Route 63 / Court Street intersection in the Town of Geneseo
- Route 63 / Route 20A intersection in the Town of Geneseo
- Route 36 / Route 20A offset intersection in the Village of Leicester

Based on the established screening criteria, the above thirteen locations were chosen to be addressed in this study. However, it is important to recognize that there were other problems and issues identified through the initial public outreach and field analyses that did not pass the screening test and were not progressed for further study. Of particular note are specific intersections mentioned by the public along Route 20 that were perceived safety hazards. These included the Route 20 intersections with Route 238, Bethany Center Road and Francis Road. Upon review, the number of accidents at each of these locations was lower than the threshold required for inclusion as a NYSDOT High Accident Location. For this reason, these locations were not considered safety deficient and were not analyzed further. In addition, there are some identified geometric deficiencies that review shows are not leading to actual safety problems.

Each of the specific problem locations identified above will be discussed in detail in this section. These location-specific needs are presented and discussed by roadway segment, beginning at the west/north end of the corridor and moving eastward/southward. Table 1, presented at the end of this document, summarizes the issues/concerns, factors contributing to problems, and type of need at each location. All of these problem locations are also illustrated on *Figure 2,* at the end of the discussion section.

Location #1: *Route 77 / NYS Thruway*

This intersection and the ramps leading from the Thruway to Route 77 experience significant congestion during the summer months when Darien Lakes is fully operational. Congestion is at its worst when the summer concert series at the park is underway with queues routinely extending from the Exit 48A tollbooths back through the ramps to the eastbound Route 90 mainline. This congested condition continues south on Route 77 all the way to the park entrance, effecting safety conditions throughout the corridor.



Looking northwest at Thruway Exit 48A - Pembroke

The NYSDOT *Route 77 Expanded Project Proposal (EPP 2001)* safety analysis showed that 21 accidents occurred at or near the Route 77/I-90 ramp intersection and the nearby truck stop driveways. The majority of these were rear-end and left-turn accidents. **The EPP suggested that difficulty exists in entering and exiting these facilities**. EPP recommended improvements include changing signal timings at the Route 77/I-90 ramp intersection to improve traffic flow and a widening from two to three lanes along Route 77 south of the four-lane section to the intersection with Route 5 to facilitate improved ingress and egress and through movements through the segment.

Location #2:
Route 77/Route 33 Intersection

The current geometry at this signalized intersection provides an insufficient turning radius to support eastbound and westbound trucks turning right onto northbound and southbound Route 77. In addition, proximity to the CSX Railroad bridge, located just south of the intersection, causes insufficient sight distance on the northbound approach. The accident analysis shows that these conditions are leading to rear-end and left-turn accidents in the vicinity of this intersection.

Route 77 southbound at Route 33

This intersection is located in the Village of Corfu. The NYSDOT *Route 77 EPP* concluded that the character of Route 77 from the Thruway to Route 20 and the varying speed limits along the Route may be contributing factors in the high number of accidents occurring at the intersection. In addition, the difficulty trucks have in negotiating turns due to the tight turning radii, combined with truck travel speeds on both roadways, may also be leading to accidents. It was found that heavy trucks were involved in 47% (7 of 15) of the accidents at this location.

Given the proximity of this location to the Six Flags – Darien Lake Amusement Park in Darien, operating conditions were also examined during the peak summer travel season when the park is open. Review of intersection volumes during this period found that the intersection has insufficient capacity during these times (failing Level of Service on the westbound and southbound approaches).

At both the project introduction meetings and first public meeting held in Batavia, area representatives, agency officials and area residents spoke out about safety concerns all along the Route 77 corridor, focusing particularly on conditions at the major intersections including Route 33.

Location #3:
Route 77 – Reynolds Road to Sumner Road

This roadway segment, which extends to the north and south of the Six Flags - Darien Lake park entrance, experiences a significant increase in the number of traffic and congestion related accidents during the peak season. Currently, the jug handle driveway providing access to the park from the north is not long enough and poorly signed, leading to confusion and left-turns into the park from Route 77, a movement that the jug handle was designed to eliminate.

Rte. 77 looking north from Darien Lake

The NYSDOT *Route 77 EPP* found that 72% of the accidents through this segment occurred during the peak season. **The majority of these were rear-end accidents associated with congested traffic conditions**. NYSDOT recommended extending the length of the Six Flags entrance drive (jughandle) and widening this section of Route 77 from the existing two lanes to three (2 NB, 1 SB) with heavy duty 2.4 meter shoulders. The two northbound lanes are necessary to support the significant peak outbound flow of traffic leaving Six Flags – Darien Lake after the park closes. Analysis shows that 80% of this outbound traffic is heading north to the Thruway. In addition, overhead signs directing southbound Route 77 traffic to the Six Flags – Darien Lake entrance roadway were recommended.

Location #4: *Route 77/ Sumner Road*

This intersection is located just south of the Six Flags - Darien Lakes main entrance driveway on Route 77 and it's operations are greatly affected when the park is open. During the three-to-four month peak season, the eastbound and westbound approaches to the unsignalized intersection have a failing Level of Service. During the off-season, the intersection functions well and no improvements are necessary.

Field review of this intersection found that stopping sight distance is non-standard on the southbound Route 77 approach. The accident analysis conducted for the NYSDOT *Route 77 EPP* found that right-angle accidents were the most prevalent, followed by left and right-turning accidents. Apparent accident clusters consisted of northbound vehicle involvement in right-angle accidents and southbound vehicles involved in left-turn accidents. There was a 57% increase in accidents during the peak season months.

Location #5: *Route 77/ Route 20 Intersection*

Field review of this intersection found that there is an insufficient turning radius to support Route 20 westbound trucks turning right onto northbound Route 77. In addition, a non-standard grade of 5.4% on the Route 20 eastbound approach causes sight-distance problems on the Route 77 legs of the intersection**. The accident analysis shows that the**

difficulty trucks have in negotiating turns are leading to rear-end, overtaking and right-turn accidents in the vicinity of this intersection.

Looking northbound at Rte 77 / Rte 20 intersection

This intersection is located in Darien Center. The NYSDOT *Route 77 EPP,* completed in 2001, found that the majority of accidents were clustered in the westbound and southbound lanes. **The majority of rear-end accidents were found to be congestion related and heavy trucks were involved in 65% (13 of 20) of the accidents, including all of the overtaking and right-turn incidents**.

The NYSDOT re-striped the approaches to this intersection in 1999 in an effort to improve turns and lane usage. The NYSDOT *Route 77 EPP* recommended future evaluation of this improvement to measure its effectiveness. Based on input received at the project introduction meetings and first public meeting held in Batavia, it appears that the 1999 re-striping effort may not have been totally effective and safety concerns continue at this intersection, particularly with the difficulty trucks have turning from westbound Route 20 onto northbound Route 77.

Location #6: *Route 20 / East Road*

Route 20 westbound at East Road

The current geometry at this intersection provides inadequate sight distance to the west due to vertical curvature/grade along Route 20 and a crest in the road located approximately 400-feet west of the intersection. Although accidents at this location are not numerous (9 over the 3 year analysis period), they tend to be severe due to the high travel speeds on Route 20 and the difficulty for eastbound traffic to stop quickly on the downgrade. **The accident analysis shows that right-angle accidents predominate and involve eastbound vehicles on Route 20 and both northbound and southbound vehicles on East Road**. The leading contributing factor has been a failure to yield the right-of-way.

This intersection is located in a rural district in the Town of Bethany. Travel speeds through this section of the corridor tend to be very high as traffic is light and roadway conditions are generally good. At both the project introduction meetings and first public meetings held in Batavia, Geneseo and Warsaw, area representatives, agency officials and local residents spoke out about safety concerns at the Route 20/East Road intersection.

Location #7:
Route 20 / Route 63 Intersection

Route 20 looking westbound at Route 63

The current geometry at this intersection features a non-standard grade on the east leg of Route 20. The accident analysis shows that twelve accidents occurred at this location during the analysis period, 50% involving trucks. The most common accident type was right-angle (5 of 12), however, no clear accident pattern is present. Therefore it is difficult to determine if the non-standard grade is a factor in the accidents. Failure to yield the right-of-way and disregard of traffic control were the most common contributing factors.

This intersection is located in a rural section of the Town of Pavilion where travel speeds are high. The majority of traffic at this intersection moves between the west leg of Route 20 and the south leg of Route 63 along the primary travel corridor.

Location #8:
Route 63 / Route 19 Intersection

Route 63 looking westbound approaching Pavilion

Although there are no non-standard geometry features at this location, both of the Route 63 approaches to this intersection are relatively long downhill sections. The long hills, combined with the high volume of trucks traveling through this segment, result in overtaking and right-angle accidents in the vicinity of the intersection. Thirteen (13) accidents occurred here during the three year analysis period, 46% (6 of 13) involving heavy trucks.

This intersection is located in the Village of Pavilion. A fifth leg is formed by Cato Street, a short local street that provides access to a residential area. **The layout of Cato Street appears to be contributing to the majority of right-angle accidents**. All of the overtaking accidents occurred on Route 63.

The public is very concerned with safety at this intersection as trucks traveling down the hills often travel at high speeds and ignore the traffic signal. In addition, trucks traveling down the hills gain momentum and speed and overtake slower moving vehicles. These problems have been raised several times during the first round of project introduction and public information meetings.

Location #9: *Route 63 / Peoria Curve*

Route 63 eastbound at Peoria Curve

This section of Route 63 includes a non-standard horizontal curve with insufficient super-elevation that, combined with travel speeds, is leading to fixed object accidents (vehicles have been leaving the roadway). This occurs despite the installation of flashing warning signs on both approaches to the curve. The accident analysis showed that sixteen accidents occurred at this location. Of these, 50% (8 of 16) were fixed object accidents resulting from vehicles leaving the roadway. Heavy trucks were involved in 56% (9 of 16) of the accidents.

This section of roadway is located in a rural section in the Town of Covington. While completing the initial public outreach effort, Peoria Curve was mentioned as a serious safety problem more often than any other location.

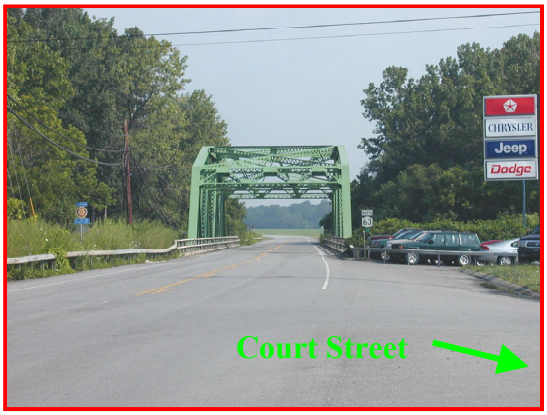
Location #10:
Route 63 / Route 36 Intersection

Route 36 northbound at Route 63

Field review of this intersection found that non-conforming site access exists on the southeast corner, contributing to the occurrence of right-angle accidents. In addition, sight distance on the west leg of the intersection is non-standard due to the location of a raised railroad grade and bridge structure passing over Route 63. The accident analysis conducted found that thirty-one accidents occurred on the approaches to this intersection, the most prevalent type being right-angle (10). High travel speeds on both routes are common. **There exists an apparent disregard of the traffic signal and a failure to yield the right-of-way.** Heavy trucks were involved in 35% (11 of 31) of the accidents.

This intersection is located in Greigsville in the Town of York. The York Central School is located just south and east of this intersection. Concerns about high travel speeds and safety at this intersection were raised regularly during the initial public outreach effort. At the School Focus Group meeting, York school officials informed the study team that they have shifted the majority of school related traffic, including all buses, to a driveway that accesses Route 36, citing that the travel conditions on Route 63 were considered too dangerous. Currently, only the pick-up/drop-off loop is regularly used off of Route 63.

Location #11:
Route 63/ Court Street Intersection



Route 63 westbound at Genesee River Bridge near Court Street.

Field review of this intersection found that sight distance is limited to the north of the intersection due to the location of the bridge carrying Route 63 over the Genesee River. The accident analysis conducted found that twenty-one (21) accidents occurred on the approaches to this intersection, the most prevalent type being rear-end accidents (9). The majority of these rear-end accidents involve southbound vehicles on Route 63 stopping to turn left on Court Street. **Given the proximity to the bridge, there is currently no left-turn lane available to separate this movement from through traffic**. Heavy trucks were involved in 33% (7 of 21) of the total accidents at this location.

This intersection is located just west of the Village of Geneseo where higher posted travel speeds are still in effect. Court Street provides access to SUNY Geneseo, the Livingston County complex and Main Street, Geneseo. It is a popular short cut for local traffic continuing to/from the west on Route 63. At the first public meeting held in Geneseo, conditions at this intersection were raised as a concern, particularly the difficulty in negotiating left-turns onto Court Street and from Court Street onto southbound Route 63.

Location #12:
Route 63 / Route 20A

Rte 63 / Rte 20A overlap northbound, at northern 63/20A split.

Field and geometry review of this intersection found several non-standard conditions. First, the skewed alignment of the intersection effects sight distance to the north on 20A, contributing to the high number of rear-end accidents occurring on the southbound Route 63 approach. Second, the grade on the southbound Route 63 approach to the intersection exceeds the maximum. Finally, the STOP sign control on the southbound Route 63 approach is proving ineffective, as the traffic volume (5,600 vehicles daily) and truck volume (1,625 vehicles daily, or 29%) is relatively high for this type of traffic control.

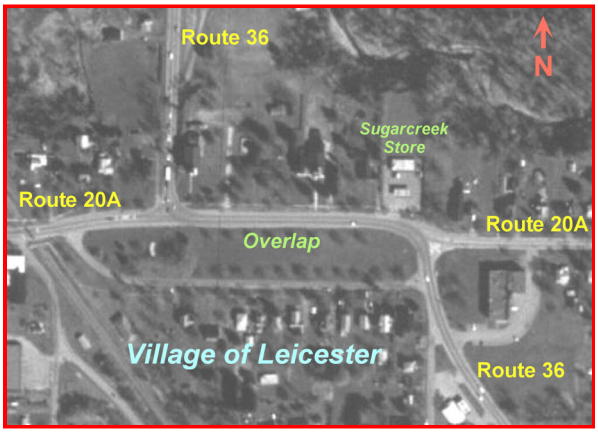
The accident analysis conducted found that thirty (30) accidents occurred on the approaches to this intersection, the most prevalent type being rear-end accidents (16). The vast majority of these (23 of 30, or 75%) occurred on the southbound Route 63 approach to Route 20A as vehicles go up the hill and stop to turn right onto the overlap section. **The difficulty in determining when it is safe to negotiate this turn is leading**

to problems, particularly when traffic is backed up on the southbound Route 63 approach. Heavy trucks were involved in 20% (6 of 30) of the total accidents.

This intersection is located just south of the Village of Geneseo in a section where local traffic pushes the total daily traffic to the highest levels along the primary corridor. At the first public meeting held in Geneseo, safety conditions at this intersection were the most commonly raised concern.

Location #13: ***Leicester, Route 36 / Route 20A Intersection***

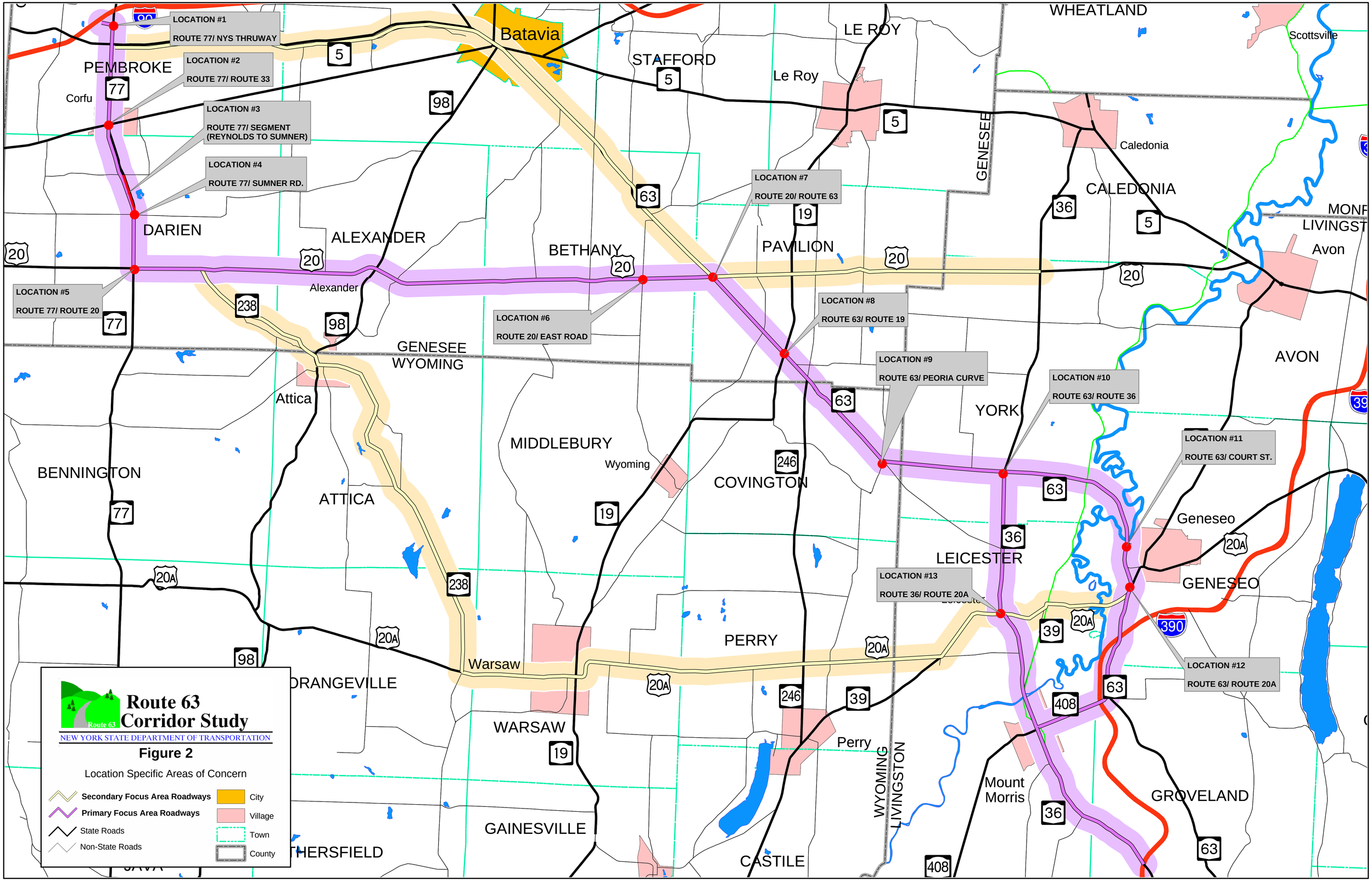
The Route 36/Route 20A intersection in Leicester is offset, with a section of Route 36 overlapping with Route 20A, resulting in a "jog" along Route 36. Field review of this intersection found non-standard horizontal curves present to the east and west of these intersections, plus narrow shoulders in sections. In addition, access to a Sugar Creek convenience store at the eastern intersection is contributing to safety concerns.



Rte 36 / Rte 20A overlap in Leicester

The accident analysis conducted found that twenty-three (23) accidents occurred on the approaches to these intersections, the most prevalent types being rear-end and right–angle accidents (7 each). The majority of the right-angle accidents occurred on the Route 36 northbound approach to Route 20A (at the east intersection) and involve northbound and eastbound vehicles. There were no clear patterns identified for other accident types. Heavy trucks were involved in only 9% (2 of 23) of the total accidents at this location.

This intersection is located in the Village of Leicester in a section where traffic has been slowed to Village conditions. At the first round of public input meetings, safety conditions at these intersections were raised as a concern by local residents.


LOCATION #1
ROUTE 77/ NYS THRUWAY
LOCATION #2
ROUTE 77/ ROUTE 33
LOCATION #3
ROUTE 77/ SEGMENT (REYNOLDS TO SUMNER)
LOCATION #4
ROUTE 77/ SUMNER RD.
LOCATION #5
ROUTE 77/ ROUTE 20
LOCATION #6
ROUTE 20/ EAST ROAD
LOCATION #7
ROUTE 20/ ROUTE 63
LOCATION #8
ROUTE 63/ ROUTE 19
LOCATION #9
ROUTE 63/ PEORIA CURVE
LOCATION #10
ROUTE 63/ ROUTE 36
LOCATION #11
ROUTE 63/ COURT ST.
LOCATION #12
ROUTE 63/ ROUTE 20A
LOCATION #13
ROUTE 36/ ROUTE 20A
Batavia
PEMBROKE
Corfu
STAFFORD
LE ROY
Le Roy
WHEATLAND
Scottsville
Caledonia
CALEDONIA
GENESEE
DARIEN
ALEXANDER
Alexander
BETHANY
PAVILION
Avon
AVON
GENESEE
WYOMING
Attica
BENNINGTON
ATTICA
MIDDLEBURY
Wyoming
COVINGTON
YORK
LEICESTER
Geneseo
GENESEO
PERRY
Warsaw
WARSAW
ORANGEVILLE
GAINESVILLE
CASTILE
Perry
WYOMING
LIVINGSTON
Mount Morris
GROVELAND
Route 63
Corridor Study
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Figure 2
Location Specific Areas of Concern
Secondary Focus Area Roadways
Primary Focus Area Roadways
State Roads
Non-State Roads
City
Village
Town
County

B. REGIONAL ISSUES/PROBLEMS AND NEEDS

Regional issues/problems and needs focus on effects and conditions created by the **significant volume of trucks on the primary corridor roadways** that stretch across the study area, from Pembroke/Darien to Mt. Morris. While the study identifies location specific issues/problems and needs, the main focus is to develop alternatives that address the effects of the increased number of vehicles and trucks using the corridor on the **safety, quality of life and economy** of the area. These three categories were raised by the public in discussing concerns along the corridor more often than any other concerns. It is generally agreed that conditions have degenerated steadily as pass-through truck traffic has increased and will continue to decline as future volumes increase. These categories are discussed in greater detail below.

Safety

From a safety standpoint, it is apparent that the high volume of trucks operating along the primary corridor is a major concern for residents. While the most glaring safety problems will be addressed at a site-specific level, input received throughout the initial public outreach process made it clear that:

- Residents along the primary corridor roadways are fearful with routine matters like pulling into/out of their driveway or having their children play or walk near the roadway.
- The volume and travel speed of trucks has forced residents to adopt a heightened level of awareness whenever they are on or near the primary corridor roadways.
- Residents are particularly concerned with student safety in and around school zones.
- The many types of users traveling the primary corridor roadways have conflicting traffic needs. In many cases these users (cars, trucks, farm trucks/equipment, pedestrians, bicylists) operate at disparate speeds creating potentially dangerous traffic conditions.
- Frequent disregard of speed limits and traffic control devices by truck drivers has been noted repeatedly during all phases of the public outreach effort.

Improving safety conditions throughout the corridor would benefit area residents, the local traveling public and all traffic passing through the area, including truck drivers. Recent traffic incidents along the primary corridor verify the concerns voiced by residents during the public input stages of this study and the need for corrective actions.

Quality of Life

Quality of life issues focus mainly on the negative impacts that result from increased truck traffic and the effects on the character of local communities within this largely rural study area. The most commonly raised issues include:

- Pollution
- Noise – general truck noise and jake brakes
- Vibrations
- Conflicts with –
    - Local motorized travel, including farm equipment
    - Local pedestrian/bicycle travel
    - School Operations
- General fear of using or being near the primary roadways
- Lack of pedestrian and bicycle facilities, especially trails, which would allow recreational travel off of the primary corridor roadways.

Each of these impacts is being experienced to varying degrees by all local businesses, farms and residences throughout the study area. In addition, the "reputation" of the Route 63 corridor as a highly traveled truck route is reportedly leading (in some cases) to dissatisfaction with living conditions, difficulty in selling residential property and, potentially, a decrease in residential property values.

Other quality of life issues focus on the desire to preserve the rural character of the study area and the impacts that increased truck traffic may have in the future. This is a farming/ dairy community, particularly in the center and eastern sections of the study area in Wyoming and Livingston Counties. Work begins early in the morning, and when the day ends, the landscape is quiet. Truck traffic continuing through the night is viewed as a disturbance and annoyance that is frustrating local residents.

Area Economy

Finally, maintaining the economic strength of the area, plus creating opportunities for growth is a need that extends throughout the study area. As noted, the economic strength of the area is in dairy production, dairy related agriculture and agri-business. This economic sector is of prime importance in the region and requires basic needs in the following areas:

- Transportation Needs – a safe, well connected network of local and state roadways that provides convenient and efficient access between milk/crop production points and regional collection/finishing/distribution points. These needs focus both on supporting/retaining existing concerns and attracting future agri-business enterprises.
- Land Use Needs – a clear understanding that preserving existing agricultural lands dedicated to dairy related industries is paramount in preserving a strong future for the region.

Based on input received through the initial public outreach process, the need to continue providing for and supporting agriculture within the study area is one of extreme concern throughout the region. No one foresees any major shift in the regional economy or other economic sectors rising in importance. For this area to remain prosperous, agriculture

and dairy-related industries will need to lead the way and both short and long-term transportation improvements must be focused on providing support to these industries.

IV. CONCLUSIONS

In summary, a total of thirteen specific locations have been identified where safety, roadway geometry and public concern combine to warrant that existing conditions be thoroughly reviewed and, where appropriate, recommendations for improvement be developed. These 13 locations are listed in Table 1, along with a description of the issues/concerns, contributing factors, and the identified needs. These, along with the regional needs, will be the focus of the next phase of the study, where improvement alternatives will be developed and evaluated.

A. Location-Specific Issues/Needs

- Route 77 / NYS Thruway – Exits 48A: reduce accidents that occurred at or near the Route 77/I-90 ramp intersection and the nearby truck stop driveways, particularly the rear-end and left-turn accidents
- Route 77 / Route 33 intersection: Increase sight distance at CSX Railroad bridge (rear-end and left-turn accidents); lengthen tight turning radii; reduce high truck speeds; more uniform speed limits; reduce congestion during Six Flags - Darien Lake operating times.
- Route 77 - Section from Reynolds Road to Sumner Road: improve wayfinding signs; reduce seasonal congestion.
- Route 77 / Sumner Road intersection: reduce congestion; improve stopping sight distance on the southbound Route 77 approach; reduce accidents for northbound vehicles involved in right-angle accidents and southbound vehicles involved in left-turn accidents.
- Route 77 / Route 20 intersection: improve truck turning difficulties.
- Route 20 / East Road intersection: improve sight distance to the west due to vertical curvature/grade along Route 20; reduce high travel speeds.
- Route 63 / Route 20 intersection: reduce travel speeds; improve the heeding of traffic control devices.
- Route 63 / Route 19 intersection: reduce truck speeds; reduce accidents at the Cato Street/Route 63 intersection (adjacent to Route 19).
- Route 63 – Peoria Curve: reduce fixed object accidents associated with vehicles leaving the highway; reduce high travel speeds.
- Route 63 / Route 36 intersection: improve site access issues on the southeast corner, which contribute to right-angle accidents; improve sight distance on the west leg of the intersection due to the raised railroad grade and bridge structure

passing over Route 63; reduce high travel speeds; improve the heeding of traffic control devices; improve safety at the York Central School.

- Route 63 / Court Street intersection: reduce travel speeds; reduce rear-end accidents involving southbound vehicles on Route 63 stopping to turn left on Court Street.
- Route 63 / Route 20A intersection: reduce the high number of rear-end accidents occurring on the southbound Route 63 approach to Route 20A;
- Route 36 / Route 20A offset intersection: improve non-standard horizontal curves present to the east and west of the "jog" intersections to reduce rear-end and right-angle accidents; address safety concerns at the access to the Sugar Creek convenience store at the eastern intersection.

B. Regional Issues/Needs

The regional need, as detailed and outlined above, is to improve heavy vehicle and passenger car mobility through the region such that it does not have a significant negative effect on safety, quality of life and area economics.

V. NEXT STEPS

Once input from the study advisory committee, the public and various other groups and interested stakeholders has been received, the list of needs will be revised accordingly and finalized. The study will then proceed to Phase II. Tasks in Phase II will focus on the development and evaluation of improvement alternatives to satisfy the identified needs. This will include several opportunities for public input, and will involve developing a wide range of potential short-term/low cost and long-term/higher cost improvements and strategies. A process to evaluate the various alternatives will be established, in conjunction with the Study Advisory Committee, which will include development of evaluation criteria, development of a decision-making matrix, and implementation of a two-step alternative screening process.

Table 1: Primary Corridor Location -Specific Needs

			Needs								
					Non-Standard Features						
Location	Issue/Concern	Contributing Factors	Capacity	Safety	Sight Distance	Pavement (Cross-slope)	Vert. Curve	Grade	Turn. Radii	Horiz. Curve	Access
Rt 77 @ NYS Thruway	Queues extending from Exit 48A tollbooths to EB mainline of the Thruway	Increased congestion due to special events at Darien Lake.	X	X							
Rt 77 @ Rt 33	Failing LOS WB & SB. Rear end and overtaking accidents	Insufficient capacity during Darien Lake season. Insufficient truck turning radii. Insufficient stopping sight distance.	X	X	X				X		
Rt. 77 - Reynolds Rd to Sumner Rd	72% of total accidents occur during peak season	Increased congestion during peak season and special events.	X	X							
Rt 77 @ Sumner Rd	Failing LOS EB & WB. 57% increase in accidents during Darien Lake season. Right angle accidents	Insufficient capacity during Darien Lake season. Insufficient stopping sight distance.	X	X	X				X		
Rt 77 @ Rt 20	Rear end and overtaking accidents	Insufficient turning radius for large trucks. Insufficient stopping sight distance.		X	X				X		
Rt 20 @ East Rd	Right angle accidents including fatalities	Rt 20 westbound, sight distance restricted by vertical curve/grade		X	X		X	X			

			Needs								
					Non-Standard Features						
Location	**Issue/Concern**	**Contributing Factors**	**Capacity**	**Safety**	**Sight Distance**	**Pavement (Cross-slope)**	**Vert. Curve**	**Grade**	**Turn. Radii**	**Horiz. Curve**	**Access**
Rt 63 @ Rt 20	Right angle and fixed object accidents	Non-standard cross-slope. Stopping sight distance less than required, excessive grade.		X	X	X		X			
Rt 63 @ Rt 19	Overtaking accidents	Speed and grades on hills into Village.		X				X			
Rt 63 @ Peoria Curve	Fixed Object accidents	Super-elevation, non-standard horizontal curve and grade present. Speeds		X	X			X		X	
Rt 63 @ Rt 36	Right angle accidents	Driveway at SE corner non-conforming to NYSDOT standards.Speeds.		X							X
Rt 63 @ Court St	Rear end & right angle accidents	Limited sight distance due to bridge north of intersection		X	X						
Rt 63 @ Rt 20A	Rear end accidents	Skewed alignment of intersection. Limited sight distance of approaching vehicles on 20A. Excessive grade. Ineffective traffic control.	X	X	X			X			
Rt 36 @ Rt 20A	Right angle and rear end accidents	Horizontal curve less than required. “Jog” in Rt 36. Sugarcreek Store Access,		X						X	X

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